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Got Milk?: Breastfeeding as an 'Incurably Informed' Feminist STS Scholar

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ABSTRACT *'Got Milk?' considers the author's own commitment to and experience of breastfeeding as a mother/intellectual, examining ways of theorizing embodiment and complex bio-social practices while also showing just how complicated living/ embodying feminist STS theory can be. Many breastfeeding advocates are naive about nature, technology, and gender issues, and many feminist STS scholars focus on the pregnant body, rather than the lactating body, to discuss gender, technology, and embodiment. Pro-breastfeeding materials often represent breastfeeding as an organic practice free from the intervention of medical experts and technologies. The author's experiences of the physical difficulties of breastfeeding, the management of breastfeeding by medical experts, the lack of social support for the practice, and the lack of a non-essentialist feminist discourse about the importance of breastfeeding left her wondering on what grounds she could and should justify her commitment to breastfeed her children. Ultimately, recognizing that breastfeeding is an embodied practice that is not free from technological intervention or other social and political contexts can counteract the romanticized, essentialized representations of breastfeeding for a stronger, if more contingent, 'cyborg' breastfeeding advocacy.*

Introduction: Diary of a First-Time Mother with Her Newborn Baby

My newborn baby is crying. I reach over and pick him up out of his little crib that's attached to my bed and raise him up to my chest. I unhook the plastic clasp of my nursing tank top that reads 'got milk?' to offer the food my baby hungers for. But

he's not latching on to my breast and now he is screaming and pounding on my chest with his fists. In my sleep-deprived, post-birth stupor I am actually wondering if I have given birth to the devil. A sudden memory of a novel I'd read years

ago-Patrick Siskind's *Perfume* (1986)-pops into my head. I think of that novel's main character, a creepy murderer named Grenouille, whose earliest sign of sociopathology was his nonstop demand for breast milk. If I have not given birth to the devil, perhaps I have given birth to a serial killer. Just my luck.

Reflections of a Feminist STS Scholar on the Commitment to Breastfeed

Breastfeeding remains a sign of organic female embodiment. Yet as a feminist STS intellectual I could not cling to any such simplistic notions of the practice. In considering my commitment to and experience of breastfeeding as a mother/intellectual, I want to examine ways of theorizing both embodiment and complex bio-social practices while also showing just how complicated living/embodying feminist STS theory can be.

My professional work as an STS professor influences my daily interactions with the world around me. I see STS issues everywhere, even on my nursing top, which bears the dairy industry's copyrighted 'got milk?' sign. This paper intends to reflect on that which I am always reflecting on: my own negotiation of my body and technologies through my feminist STS intellectual and political lens, a lens that has me recognizing that people and their practices are neither pure biology nor pure culture.

That knowledge ultimately neither encouraged nor discouraged my commitment to breastfeeding. It did, however, make my position on breastfeeding challenging to sustain because I could not, like other breastfeeding mothers, simply cling to a belief in or, importantly, a way of experiencing breastfeeding that told me I was doing what comes naturally and resisting oppressive technologies. How could I narrate my own 'choice' of breastfeeding? On what grounds could I commit to this practice as I faced the challenges involved? Could I be a cyborg rather than a Goddess when I breastfed my baby?

For me, being an STS-informed feminist means I reject naturalistic discourses of women and their bodies. It means that I see the complex relationships between bodies and technologies as expressions of structural gender inequalities. While I daily observe the tensions and issues about which I teach and write, my breastfeeding experience reveals the ways in which that knowledge did not put me in a position to navigate the territory effortlessly. *Understanding* the feminist and STS issues involved in breastfeeding or the impact of breastfeeding on my position in the family and workplace did not mean that I could *do* anything about them. This paper is thus also an exploration of what it means to be an 'incurably informed' feminist. 1

I didn't see breastfeeding through exclusively STS or feminist eyes; for, like many people, I was seduced by a way of thinking about breastfeeding that was

informed by a complex pop-feminist, pop-scientific, anti-capitalist, and perhaps even anti-technology ethic. My approach to infant feeding was influenced by an ethos that sociologist Chris Babel (2002) calls 'natural mothering', in line with those who believe that 'consumerism, technology, and detachment from nature are social ills that mothers can and should oppose' (p. 1).

As an STS scholar I knew, unlike the 'natural mothers' Babel studied, that the nature-culture dualism is a false binary. There is really no such thing as *natural* mothering to reject a technological embodiment using formula; but hadn't I also learned that some technologies, if not downright evil, are complicit in forms of inequity, ill health, and other social problems? It was on this basis that I could never have been sold on infant formula. I imagined that no corporation could create a technology that would be better than I would be at feeding my baby. Indeed, it seemed, I could 'choose' corporeality to combat corporatism.

In addition, I thought formula feeding would take me away from an important emotional bond that being a mother was, after all, all about. It was the embodied experience of breastfeeding that I wanted. I had imagined it to be a warm-and-fuzzy intimate experience in which I'd offer nature's bounty to an eager, happy infant. Long before I had given birth to my son, I knew that I would breastfeed, like all women should, I believed.

But breastfeeding was not the effortless and enjoyable experience I imagined it to be. It's tough to assign blame to someone or some group for my naive expectations: a subset of feminists? A subset of earthy-crunchy anti-technology STS types? A subset of expectant mothers in my birthing class or the videos shown in the birthing class? In any case, the reality was more complicated than I'd anticipated, prompting me to think through how I came to imagine breastfeeding, and the grounds upon which I would commit to the practice.

My baby, in the scenario that opened this essay, was angry because he couldn't get the breast milk he wanted. I'd produced too much milk in those first few days after the birth, making my breasts too full and hard for him to nurse from. I had a problem, the baby had a problem, and I needed to find a way out of it.

My commitment to infant feeding free from technology had to end at this point as I rushed out for a breast pump, pumping enough of the milk out for him to be able to breastfeed. Luckily, the breast pump was available to borrow from the local lactation consultant who worked out of the hospital in my town. For weeks breastfeeding was so painful that I had to employ another technology-pain relieving medicine-20 minutes before my baby was likely to nurse just to be able to nurse him without crying and screaming myself. And so it was that my own expectations about breastfeeding my baby became more visible to me.

Although I had rejected, academically, the naive essentialism of cultural feminism, I found myself longing for the relatively easy narrative of natural breastfeeding. It was as if my STS knowledge made me anti-technology and my feminist knowledge made me skeptical of the discourses of motherhood and womanhood,

which women usually used to counteract critiques of technology. Of course the literature on studies of science and technology in society offers a more complicated picture, as does feminist scholarship: And so as I reflect here on the complicated and often troubling experiences I had as a breastfeeding mother /intellectual, I want to consider what these experiences can tell us about how we theorize embodiment and the complex bio-social practices of breastfeeding and mothering more broadly.

The Embodied Realities of Breastfeeding

Despite a certain desire for a natural maternal body, I quickly realized I had no idea how to breastfeed. I first fed my baby in a hospital surrounded by nurses who were putting their gloved hands on my breasts, squeezing my nipple, and shoving it into my son's mouth. (Needless to say, the eagerly anticipated experience of intimate bonding with baby did not happen then.)

The knee-jerk assumption might be that breastfeeding requires no 'knowledge' -that it's natural or instinctual (see Figure 1). Despite my knowing that biological events like birthing and breastfeeding are culturally mediated and far from 'natural' events, I couldn't help feeling like a failure when I needed help nursing my baby, when it didn't come easily. But breastfeeding is difficult and I was fortunate to have nurses who encouraged me.

The nurses, however, did not encourage me until I told them I wanted to breastfeed and asked them not to give my newborn a bottle. In this way breastfeeding was presented as my choice to assert. My breastfeeding class had prepared me for this moment of 'choice', which, if not forcefully exerted, would lead to



Figure 1. 'Babies were born to be breastfed', also published in Spanish. Credit: Katie Endle for Noodle Soup of Weingart Design, <http://www.noodlesoup.com/borntobreastfedposter.aspx>

bottle feeding. Telling the nurses I'd wanted to breastfeed was not a simple matter of choice, even though this is exactly how they presented it to me. As if fearful of offending me, the nurses asked me gently if I intended to breast- or bottle-feed. My answer then determined whether or not they would encourage and train me in the art of breastfeeding, and with which supplies to send me home from the hospital including which of the two complimentary diaper bags stuffed with corporate samples of diapers, wipes, baby soap, and cold-storage bags I was given. (At some hospitals, it should be noted, there is only one diaper bag-the one stocked with formula samples.)

It was as if honoring a woman's right to choose formula feeding was as important as a woman's right to breastfeed her baby-which is surprising given how forcefully the medical community pushes women into practices it deems healthy. In one of the only books about breastfeeding controversies written by a feminist STS

scholar, Bernice Hausman (2003) argues that the decision about breast- or bottlefeeding is framed as a mother's choice, despite the medical literature, public health campaigns, and even formula advertisements being consistent on the position that breastfeeding is healthier for both mother and baby.

Deciding at the outset to breastfeed (or not) sets a woman up for a specific embodied experience of mothering. Breastfeeding elicits a bodily connection between mother and baby, which most mothers first experience with a baby growing in their bellies. As a breastfeeding mother, just hearing my baby cry which he usually did when he woke up and/or was hungry-made my breasts ache and start to leak milk. One mother I know of had her first experience away from her baby at a shopping mall, where she heard someone's baby crying and promptly began leaking breastmilk. (She didn't rush home, but she did buy a new sweater.) The choice of breastfeeding is a choice of embodiment, one that the formula choice obviates.

Like all expectant mothers, I was exposed to the choice of formula feeding prior to giving birth, for while my breastfeeding and childbirth classes directed expectant mothers to breastfeed, I also received direct marketing from formula companies attempting to teach me about the benefits of formula feeding. As soon as my partner, Todd, kindly purchased a nursing tank top for me from a maternity clothing catalog, during my pregnancy, formula companies sent to our address numerous samples and 'educational' brochures. Personalized letters discussed our options: 'Dear Todd, Now that you are about to have your baby, you are probably feeling a combination of excitement and anxiety ... '. Formula companies have been marketing to expectant and new mothers in the US since the early 1990s, using direct mail, doctors' offices, hospitals, and paid advertisements to promote formula feeding (Hausman, 2003, p. 95).

So while I received my share of pro-formula advertisements, I was exposed to a bigger proportion of pro-breastfeeding materials through a midwife, a natural childbirth class, a lactation class, and friends in my demographic. I had watched videos in my breastfeeding class, which I took while pregnant, that depicted

nursing a baby as a peaceful, intimate activity. My naïve expectations about breastfeeding were actually fueled by the very pro-breastfeeding and antifformula materials to which I'd been exposed.

Pro-breastfeeding materials showed beautiful images of fit, attractive mothers nursing their babies while sitting in beach chairs or perched on a rock near a waterfall. Despite being a feminist STS scholar, I was exposed to the same images that any other expectant mother is exposed to in doctor, midwife, and hospital waiting rooms, and through the literature companies mailed to me at home. I was seduced by these images; indeed, I planned to go on hikes to waterfalls just like the one in that picture, especially in my new location in the mountains of western North Carolina.

In the videos I watched, mothers took their happy babies over to a couch and sipped on their ice water while their babies effortlessly latched on to nurse. If there were older children in the videos, they sat patiently and lovingly while their mothers nursed their little sibling-they did not bite the baby, get into the cat litter, or climb onto the stove. Scenes of smiling babies who waited patiently

while their mothers took them over to a comfy couch or chair, arranged pillows into orthopedically correct positions, removed a strip of clothing in a way that did not show their breast to anyone but the baby, and then latched the baby onto their breast, while soft music played in the background, hardly prepared me for the reality of breastfeeding.

It's probably the case that some would see such depictions of breastfeeding as feminist, and as based in a natural-mothering ethos-but these representations of breastfeeding fail to show the complex amount of physical and emotional energy that breastfeeding takes, and the social support women need in order to accomplish it. As Hausman notes, television depictions of breastfeeding are frustratingly unrealistic, even when they appear to be pro-breastfeeding. Hausman (2003) relates a scene from the medical drama *ER*:

A black woman gave birth to a premature baby who was then treated in the NICU (Neonatal Intensive Care Unit) for weeks. When the baby was finally allowed to take nourishment by mouth, the mother sat in a rocking chair and calmly nursed him. There had been no previous discussion or representations of her pumping her breasts, the difficulties associated with establishing a milk supply with a breast pump rather than a baby, or the issues involved with initiating latch-on with a premature infant previously fed intravenously or through nasogastric tubing. The message was 'Breastfeeding, no problem!' which, on the one hand, is welcome news, but, on the other hand, is completely inaccurate (pp. 61-62).

Perhaps less obviously than television shows, the technology of the documentary style breastfeeding video is a mediated experience,² much like home videos of a toddler's birthday party in which parents have edited out the tantrums and other

undesirable memories from the narrative ultimately told in the family video. While the lovely breastfeeding videos had me committed to breastfeeding before I had even given birth, their representations composed a smooth, and artificial, picture of nursing-setting me up for confusion, anxiety, guilt, and pain.

I found it physically painful to nurse not only because my nipples were so sore and my breasts were, for a time, engorged, but also because I could never get into one of those comfy positions from which to nurse the baby in a relaxed posture. By the time I got him latched on, my body was contorted into a form that pinched nerves and knotted muscle tissue. But I didn't dare shift positions. The experience was not just physically but also emotionally difficult for me because my baby (to say nothing of the mother!) did not seem as happy as those in the videos I'd seen.

I could never find the discreet nursing clothes or poses that I had seen depicted. In fact, during one of the first times I nursed the baby at home I was sitting in bed and a workman, scheduled before I gave birth unexpectedly early, came to the door of the bedroom. Of course I knew the feminist critiques of the sexual objectification of women's breasts and the social mistreatment of women's nursing in public (see Figure 3). But there I was, fully exposed, feeling as embarrassed for him as for myself. Fortunately, the workman hung onto his paintbrush and let me know that he was unfazed by remarking that he had four little brothers. Immediately after that I was in the same position when my housekeeper (also a

man) dropped in. He, too, just stood casually talking to me while I awkwardly fumbled around in my nursing tank top, taking out a breast to offer my baby.

To avoid these scenes in my professional context, where I still had to go with my baby despite my being on leave, I took him to a campus restroom. I stood in a stall with one foot up on the wall, resting my baby across my thigh while I stooped over to nurse him. It might be worth noting here that the job category in the United States in which women (but not men) are among the least likely to have children is that of professor. Both being an academic and being a mother are all-encompassing identities. The two are, therefore, oxymoronic (Weiss, 2008, pp. 181-202). Of course, as others have already noted, the practice of breastfeeding opposes the bodily experiences and identities of most people in Western societies today (see Hausman, 2003; Biiskens, 2001). For a professor in particular, there might be a very strong tension between the embodied role of mothering and the disembodied role of the intellectual, given how the mind-body split still affects the way we understand identities and social roles. Breastfeeding made it impossible to ignore that which being a professor made easy to ignore: my own embodiment. Recognizing my embodiment and occupying two conflicting roles were indeed two of the challenges I faced once I had committed to breastfeeding.

To commit to breastfeeding as an academic, then, I had to commit, at some level, to challenging my understandings of both mothers and intellectuals. And whether or not I nursed the baby in the bathroom stall, I did challenge the mother/intellectual divide. After all, how many professors watch a woman harnessed to her baby who has just spit up on her jacket shoulder run a meeting?

(Noted to self: stop wearing dry cleanable clothes, especially black.) Some mothers can 'hide' the complicated juggling of work and family, but because I breastfed, I engaged my professional role and competing identities differently. The difficulty of negotiating my mother/ intellectual identities was yet another factor prompting me to question my commitment to breastfeeding.

Maintaining a Commitment to Breastfeeding

Suddenly I could see why so many women who, like me, intended to breastfeed their babies gave it up for the technological fix of infant formula. And yet I had all the reasons to breastfeed: it saves money (a year's supply of formula and bottles would cost about \$1,400); it is healthier for the baby; it offers the baby immunizing properties; it helps the mother lose the baby weight and lowers incidents of some maternal health problems; it has a calming effect on a baby; it offers a lovely bonding experience for the mother and baby; and it is convenient-a woman can take the baby anywhere and offer her own nourishment. But I was far too tired to go on hikes or carry a baby around in a backpack the way the women in my pro-breastfeeding materials did. Of course, those very same breastfeeding guides tell women to 'structure your life in a way that makes you feel good and keeps you healthy', as though this is a simple matter within the mother's decision-making power (*Motherwear's Essential Breastfeeding Guide*, 2001, p. 28).

The most recent data show that most American women of all ages, races, economic

levels, and educational backgrounds start out nursing their infants, but many of them stop breastfeeding and switch to formula. In 2004, 70.3% of American mothers breastfed their babies for some period of time. By the time their babies are six months old, however, only 36.2% are breastfeeding their babies. By the time their babies are one year old, that figure drops to 17.8%.

In 2004, white, Asian, and Hispanic mothers were about as likely to breastfeed their babies at each stage (in the post-partum period, at six months, and at 12 months), but (non-Hispanic) black mothers were much less likely to do so, with only 50.4% ever breastfeeding, 21.1 % breastfeeding at six months, and 8.1 % breastfeeding at 12 months. The age of the mother is also correlated with her likelihood to breastfeed. In 2004, 14% of mothers ages 19 or younger breastfed their infant at six months, compared with 30% of mothers aged 20-29 and 44% of mothers over 29 (Child Trends Databank, 2008).

I came to understand the reasons so many women switch to formula feeding: it is convenient-men can do it, babysitters can do it, grandparents can do it; it is less socially awkward; it would involve no physical pain; I would not have to eat so much and feel so hungry; because it is harder than breast milk for a baby to digest, it makes the baby sleep longer periods of time, enabling the mother to get more rest (I'd even be able to take sleeping pills!); breast feeding was actually not free given the demands it made on my time; and, given the devil-baby

behavior, I started to think that formula feeding might create a better bonding experience, or at least give me back my sanity. If I were willing to allow the possibility of my baby dropping a few points on his future SAT scores, I would embrace formula.

The SAT scores joke points to a more serious matter about the context of making the decision to breast- or bottle-feed a baby. Were I-a privileged American with health insurance-to opt for formula, my baby would probably be OK. It's true that some studies suggest that possibly he could have allergies later in life or possibly go down a few IQ points, but he's not likely to become seriously ill because he was formula fed rather than breastfed.

I had known of and participated in the 1980s boycott of the Nestle corporation (see Figure 2) for its peddling of formula to the third world, to many mothers who had no access to clean water and where the mortality rate of formula-fed babies was sky high.³ But that's not my situation. I have clean water. I am also economically privileged enough to be able to afford both formula and the babysitters who could feed it to my baby. In my case, breastfeeding can feel like a life choice, a matter of my personal commitment as a mother-one made most frequently by women in my exact demographic: well educated, moneyed, older, and who are, not unrelatedly, comfortable with and empowered enough to claim 'alternative' practices. For all the other women, who aren't shopping for anatomically correct baby dolls and naming their kids Cricket and Tree, the decision to



breast- or bottle-feed is more obviously a condition of resources, politics, and policies.

Clearly women are more likely to remain committed to breastfeeding when they have the social support and resources to learn how to do it. It's easier if their paid jobs give them enough flexibility to leave to nurse their babies or to pump their breast milk. But women might also be more likely to remain committed to breastfeeding their babies if they had a realistic understanding of its challenges.

Breastfeeding is not a natural, instinctual biological drive and that alone. It is, as Donna Haraway has said many times, a combination of nature and culture, of instinct and learning, of biology and environment. As Haraway (1991) stated in her now famous essay, 'A cyborg manifesto':

Up until now (once upon a time), female embodiment seemed to be given, organic, necessary; and female embodiment seemed to mean skill in mothering and its metaphoric extensions. Only by being out of place could we take intense pleasure in machines, and then with excuses that this was organic activity after all, appropriate to females (p. 180).

For an STS scholar who understands nature as always already tweaked by culture (and vice versa), and who wants to embrace technology as much as critique it, there really is no such thing as, nor any point of seeking, 'natural mothering'. In identifying this reality, then, I reached not a resolution but a continuing tension. On what grounds could I maintain a commitment to breastfeeding, and whom would my discourse convince? How could I articulate through the practice and discourse of breastfeeding-the very sign, for so many, of an organic female embodiment-Haraway's (1991, p. 181) statement concluding her famous essay: 'I'd rather be a cyborg than a Goddess'?

Breastfeeding and Expert Knowledge (or, Does My Body Have Any Wisdom?)

Somehow I understood the tension between nature and technology better in the case of the birth itself, for I knew that my plans for a 'natural' birth were *really* plans for an *unmedicated* birth. The birth would still take place for me, a 39-year-old (and therefore 'high risk') pregnant woman, in a hospital with all sorts of technologies my midwife would have at the ready. The birth was preceded by countless medical screenings (e.g. for genetic abnormalities) and interventions (e.g. receiving an Rh immune globulin shot to prevent blood-type incompatibility) during my pregnancy. And, I'd simply been lucky-I actually did have an unmedicated birth that was over in less than four hours (see Halfon, 2010, this issue).

This is the luck my mother had nursing her children. When she had her children in the 1950s and 1960s, artificial infant feeding with formula was all the rage, a

new technology that was considered an improvement over any methods humans had been using for all of human history. Sort of like lawn fertilizers. But my mother, with whom I've had recent conversations about this subject, had a traditional obstetrician who actually told her to breastfeed her babies; like many women, she did what her doctor told her. Unlike many women, she was fortunate not to have any major problems nursing and so did not give it up and switch to formula.

Like my unmedicated birth, my practice of breastfeeding was highly medicalized, couched in scientific debates about what is best and why, and reliant upon expert knowledge in a variety of ways. Without the knowledge and intervention of experts, I could not have continued breastfeeding. My commitment to 'natural mothering' involved expert knowledge and technology.

This, however, is not 'the paradox of natural mothering' that Chris Bobel (2002) discusses in her book with this title. For Bobel, a feminist sociologist who believes in affordable daycare and other options that enable mothers to work in the paid labor force, the paradox lies in the fact that natural mothers must lodge themselves firmly at the center of their children's lives, replicating patriarchal family roles, whilst insisting that they seek progressive social change through their childrearing practices. Bobel (2002, pp. 26-27) also sees in natural mothers a paradox of resisting mainstream cultural beliefs about parenting only to accept uncritically a biologically determinist belief in naturalism. For example, one mother in Bobel's (2002) study explains:

[M]other Nature has given woman the position of bringing the next generation to fruition in her own body and, in addition to that, has provided her body with the ability to nourish and nurture that infant, at least until the age of one-literally nourish until the age of one. I believe that. I did it. So, then, why should it be wrong for the woman to continue in that role (p. 87)?

For an STS scholar and a poststructuralist feminist like me, the paradox was different. I am not a cultural feminist who believes women are instinctually more nurturing or intuitive than men. I do not think women are naturally good

mothers. Moreover, my STS knowledge and my own difficulties as a virgin breaster made it impossible for me to believe I was doing what comes naturally.

While breastfeeding promises to be low- or anti-tech and to allow a mother to escape the trappings of experts and institutions who tell women what to do with their bodies, in reality it requires a great deal of commitment, expert intervention, social learning, and technology.

Importantly, it did not enable me to feel like I knew best or that my body would guide me toward what was best. Feeling like I was an authority about my body-or that my body was some sort of authority to/for me-is itself a kind of feminist impulse that seems part and parcel of the *Our Bodies/ Ourselves* feminist health

movement. It seemed ironic, then, that my own commitment to breastfeeding became a commitment to scientific and medical authorities.

We rely on expert knowledge in just about all that we do, including how we understand our own bodies and their relationship to the world around us. I took the birthing class; I took the breastfeeding class; I called the lactation consultant; I needed the nurses to show me how to breastfeed the baby. And the medical management of infant feeding doesn't end there. Within a few days after the birth of my son, doctors would assess how well the breastfeeding was going by checking his weight and other signs such as how many wet and poopy diapers he had each day. Luckily my baby had not lost much weight in the first week-an indicator that he was getting enough breast milk. When babies have lost too much or not gained enough weight, medical practitioners suggest that the mother begin supplementing with formula.

My experiences confirm Hausman's (2003, p. 190) argument that the medical management of mothers can cause in women a serious distrust in their own experiences and interpretations of their bodies. The scientific and medical knowledge with which pregnant women and new mothers are bombarded create an overreliance on expert knowledge-whether they wind up breastfeeding or formula feeding. My experiences taught me that the claims by La Leche League and other breastfeeding advocacy groups, including my own birthing class and lactation class teachers, only served as another overarching discourse influencing my decisions and experiences.

Anthony Giddens (1991) has argued that we now live in a post-traditional society full of expert knowledge, offering us loads of information with which to weigh risks, reflect on the consequences of our choices, and weigh even the risks of listening to one expert over another. Giddens (1991) offers the concept of 'manufacturing uncertainty' to convey the work we do to weigh and manage the risks in our choice-making. We fashion a lifestyle politics-after choosing what we want to do and who we want to be. Clearly, as my case illustrates, increased choice can be as troubling as it is liberating.

On top of the competing discourses of experts, I, like most new moms, dealt with the folk wisdom of my baby's aunts, grandmothers, and others. I entertained the repeated suggestions that formula would make the baby sleep longer at night (giving me more rest), that the baby should be put in a separate room to 'cry it out', and that I was going to 'spoil' my baby by being there so often to nurse him.

My own self-identity as an expert on these matters came into play here. I was furious that people who had absolutely no scholarly training and no intellectual wisdom about the debates over formula feeding were nevertheless so secure in their views and proceeded to share them with me so confidently. I just stood groggily listening to everyone's advice. What could I have said? 'I'm doing as nature intended!' wouldn't have worked because I know too well that what counts as natural is already cultural. And 'I know what's best because I'm the baby's mother!' wouldn't have worked either because I myself was fully informed by a

number of experts, from La Leche League to my midwife to the hospital staff nurses. Out of sheer desperation, I thought of resorting to, 'If God had intended infants to be fed on formula, then he would have .. .' or simply, 'Go fly a kite!'. It was clear to everyone who looked at the dark circles under my eyes that I was not thriving. Indeed, I did not seem to know what I was doing at all. Of course, those observing me had also been influenced by images of the lovely nursing mother or, alternatively, of the superiority of medical technology in a bottle-including the separation from, and rational management of, baby that formula feeding affords the mother.

At the same time, I recognize that my relationship to the expertise of my midwife, the local lactation consultant, <mid my natural-birth class instructors was a smooth one. As a privileged white woman, I trusted their advice and felt comfortable with their management of my infant feeding. I identified with them and their values more than I identified with my partner's mother and sisters. Black women and poor women, by contrast, may have very different relationships to medical authority and different reactions to having their behavior judged by it. Unlike me, these women have often been depicted and viewed by medical and other social institutions as irresponsible and untrustworthy (see Takeshita, 2010, this issue). In short, they may have more reason than I did to put their faith in the advice of mothers, sisters, and grandmothers (Hausman, 2003, p. 29).

I had friends-many of whom are, predictably, STS scholars who were equally if not even better informed about these issues-who did not advise me to stop nursing the baby, but their advice was not unified and consistent either. After all, not all scholars agree, as we know. This was obvious at the baby shower that two of my colleagues at my former university insisted on throwing for me. One party host was trained in the humanities, the other in the sciences. Both were friends, both were feminists, both had children of their own, and both were elated that I was finally, at almost 40, having a baby. One of them gave me a box of disposable breast pads, which fit inside a bra to prevent visible milk leakages and a copy of *The Womanly Art of Breastfeeding*, the La Leche League (2004) publication that is categorically pro-breastfeeding. The other gave me a plastic bottle, a bottle brush, and a packet of powdered infant formula. (In case you're curious, the humanities professor gave the breastfeeding gift, and the scientist offered the formula gift.)

My new colleagues at my new university-all self-defined feminist scholars-were equally keen on throwing me a baby shower. They decided to gather money from 20 or more people and get one big gift. One person suggested a breast pump, so that I might continue breastfeeding but also have the option of pumping the milk and allowing others to feed the baby. A debate over email ensued, with

some scholars suggesting that a breast pump defined me in terms of my body. In short, they said, buying me a breast Pump would be essentialist.

They did not think it would be essentialist because they believed that I should only feed my baby 'naturally', without pumping. Rather, they thought it would be

essentialist to define me in terms of my body's ability to produce breast milk-as if this alone takes women down the slippery slope of defining them in biologically determinist ways or in terms of patriarchal domesticity. This taught me that feminist scholars struggle over the fuzzy line between nature and culture, so much so that even acknowledging that a woman can breastfeed seems dangerously close to defining her as nature itself.

This notion would be anathema to Bobel's natural mothers, who proudly define themselves as gifted with an ability to deliver nature's perfect food to their babies. My colleagues' disagreements over whether or not to endorse breastfeeding through their choice of gifts reveal the conflicts feminists still have over the maternal body. It is to these conflicts that I now turn in the hopes of suggesting a resolution born of my breastfeeding experience.

The Body in Feminist and STS Literature

I could never reassure myself that my breastfeeding was more natural. I lacked the beautifully embodied ideology of 'Stone Age mothering', Hausman's (2003) term for the breastfeeding advocates' narrative that encourages women to breastfeed by invoking a neo-Darwinian argument about the human female's body being designed for a close physical and psychological relationship to infants. Breast is best, in other words, because it is adaptive or 'human nature'. Hausman provides a compelling critique of the way the discourse of Stone Age mothering invokes nature as though whatever is natural is therefore moral. As she puts it: 'Articulating evolutionary theory in the context of breastfeeding advocacy often ignores the political contexts of contemporary motherhood in favor of an essentialist notion of universal, biologically-determined, maternal practice' (Hausman, 2003, p. 126). She also argues convincingly that the discourse of doing what is presumably natural works best, in the case of breastfeeding, for privileged white women and backfires for black women who have historically had to struggle against associations with 'natural' and 'primitive' practices. Further, the discourses of medical health often conflict with the discourses of naturally evolved practices.

Not only have others, Hausman included, provided a compelling critique that squashed any ability for me to sit and nurse my baby thinking I was doing the right, natural thing that bonded me in sisterly harmony with generations upon generations of human female ancestors, but my own work also deconstructs narratives of evolutionary 'science' as they pertain to the male body. In *The Caveman Mystique* (2008), I argue that men's felt desires are an embodied affect of a popular Darwinian discourse that positions their sexuality as rooted in urges that were adapted for cave-day living. I could not possibly experience breastfeeding as a

'Pleistocene pleasure' (Hausman, 2003, p. 140). This is precisely what women who are otherwise like me in the pro-breastfeeding support groups get to feel. My longing to feel more like those other mothers reveals my uneasiness with

the tightrope I walk as a feminist STS scholar who lacks the epistemological safety net of certainty beneath me. 4

Feminist STS scholars offered powerful critiques of the medicalization/technologization of childbirth and infant care. Emily Martin, as one example, argues in *The Woman in the Body* (1987) that childbirth in a technological society is a production process in which women's bodies are baby-making factories. If women's bodies are machines to be improved and calibrated, then other processes, such as infant feeding, can also be medicalized, managed, and controlled (Bobel, 2002, p. 144). Infant formula can be seen as symbolic of the laboratory-produced product that purports to make a mother better than the one nature designed.

This critique has been understood and expressed by regular moms in a variety of ways. One reaction to the feminist criticism of medicalization and other appropriations of the female body was to valorize the body, viewing the body as a site of resistance to oppressive practices. So breastfeeding could be seen as an embodied practice that naturally resisted. The 'natural mothers' in Bobel's (2002) study embrace breastfeeding as part of a child-centered lifestyle that resists the hypermaterialism of our times. While experts and institutions do not control these women and their children, these women have then surrendered control to 'nature', restructuring their lives according to what they think nature requires. Bobel (2002) explains:

The natural mothers exalt nature as a force to be trusted and respected, and this realization sometimes shocks them. Subsequently, they shift their perspective, relinquishing control to nature, restructuring their lives, and sometimes 'sequencing' their careers. Few sacrifices seem too large. While the women claim that their lives as natural mothers resist a set of social beliefs derived from mainstream culture, they uncritically accept a different but nonetheless powerful belief in naturalism (pp. 26-27).

If we do not want to embrace a naive belief in naturalism, can we commit to breastfeeding? Can we prefer or prioritize a particular embodied experience over another? If so, on what grounds? My practices weren't so different from the mothers in Bobel's study-for though I made no homemade bread and did not keep up my vegetable garden, I was almost constantly available to my infant, co-slept with him, nursed him in the middle of the night with no attempt at night weaning, and nursed him far longer than average-but I narrated my experiences differently. What are the political consequences of the narrative of natural mothering versus the narrative of unnatural mothering that is nevertheless just as committed to breastfeeding? I had identified with modern medical science and its values and I had employed its technologies. My birth and breastfeeding experiences reveal the ways in which these events have become medicalized. What difference does it make to recognize this, and not tell myself and others

that I'm just doing what comes naturally or that I'm resisting scientific authority or oppressive and unnatural technologies?

One ideological effect of the discourse of natural mothering is that it positions nature as superior to and separate from technology. It also sets people up to expect that breastfeeding will be easier or simpler because it is natural. Furthermore, it reinforces a Luddite view that technology must be bad-contradicting the many ways in which successful and prolonged breastfeeding often require medical experts and technologies employed by experts and/or the mother. It also reinforces, however ironically, the simplistic view that science and expert knowledge more generally can tell us the truth about nature. The discourse of natural mothering devalues the work of breastfeeding and infant care more generally and perpetuates a longstanding (essentializing) connection between women and the body. Finally, natural mothering is construed most often as an individual commitment and choice made by an individual mother who is willing to buck the technological system and instead do what nature intended.

This way of seeing breastfeeding forces women who make the 'choice' of breastfeeding to pay the costs of it, rather than enlisting family members, employers, and society in general to accommodate the embodied needs of the nursing mother and her child. Instead of focusing on what is natural or how women's bodies were designed, we might instead focus on the circumstances in which women find themselves-and altering those to support the practice of breastfeeding. Let's face it: most of us do not have or want a lifestyle of our evolutionary ancestors or its peculiar romanticized, post-industrial American variation, voluntary simplicity.

If the discourse of most breastfeeding advocates is naive about nature, technology, and gender issues, might feminist STS scholarship offer a better discourse supporting breastfeeding? Unfortunately, as Hausman (2003, pp. 190-193) noted, feminist STS scholars have been largely silent on the topic of the lactating body-despite a widespread focus on both the pregnant body and reproductive technologies surrounding women and pregnancy. Looking at the feminist literature on the body offers insights for why some embraced breastfeeding while others disparaged the practice.

Feminists who embraced Elizabeth Grosz's (1994) 'corporeal feminism' had a poststructuralist theoretical framework for thinking about embodiment, avoiding the traps of cultural feminist/naturalist views of the body. Corporeal feminism enables us to place the body at the center of analysis and of subjectivity but without treating the body as biologically given or ahistorical.

But this new focus on the body, which captured the attention of feminist and STS scholars such as myself throughout the 1990s and early 2000s, was not met with enthusiasm everywhere. Some feminists feared that the new focus on the sexed body would only reassign women to the body (and men to the mind), or emphasize the body as a place of freedom and play rather than of struggle

and material inequity. For example, Teresa Ebert (1996) argued that feminists must rely on historical materialism-not poststructuralist body theories that valorize notions of embodied engagement with political struggle. Using the new feminist embrace of breastfeeding as her example, Ebert (1996) states:

[S]tudies validating breast feeding-and the corporeality of the subjectivity of mother-are appearing at a time of considerable unemployment and corporate attempts to downsize the labor force-including managerial and professional positions-in the United States. It is also a time of corporate and small-business backlash against providing social and medical benefits to workers, as reflected in the increasing employment of temporary workers without benefits, and in business opposition to universal health coverage. The renewed valorization of breast feeding and maternal care, the celebration of the 'intensities and flows' of the body in such texts as Grosz's *Volatile Bodies*, are complicit with the political status quo in that they contribute to current efforts to recall women from the labor force and are linked to other regressive efforts to reinstate domesticity, the traditional family and the regime of the social as composed of specific bodies (pp. 238-239).

Babel's view of the 'natural mothers' she studied indicates a certain agreement with Ebert, specifically that breastfeeding leads one to have to remove oneself from the labor force and perform a whole host of traditionally feminine domestic duties. Babel's (2002) study painted a picture of committed, earthy moms who breastfeed their babies, bake homemade bread, and engage in other 'alternative' practices such as medicinal herbal treatments. These women must strike a 'patriarchal bargain' with husbands who play the breadwinner role and who, as the researcher observed, sit on the couch watching TV after work.⁵ For Babel and Ebert, breastfeeding advocacy entails chaining a woman to domestic femininity, even if it gets a bohemian twist.

But a commitment to breastfeeding need not be only the mother's, and a commitment to a variety of parenting practices that are connected to, but distinct from, breastfeeding, do not require a traditional relationship between a man and a woman. After all, while men can't breastfeed they can certainly bake bread and run a vacuum. And women's paid employment situations need not prevent them from nursing, or pumping breast milk for, their babies. Ultimately, the maternal body's ability to produce breast milk and nourish her baby with it need not lead to patriarchal family structures or a renewed association of women with biological essentialism. But feminists seem to lack the arguments for how we can embrace simultaneously a feminist view of gender and family roles, a poststructuralist understanding of the body, *and* breastfeeding.

Just as my STS knowledge neither made my position on breastfeeding simple nor enabled me to avoid medical and technoscience expert systems, my feminist

knowledge of gender inequity did not enable me to avoid all the typical struggles women have with their male partners. Indeed, breastfeeding a baby does tie the mother to her infant and frees up a co-parent to do other things, sleep longer, be away from home longer, and so forth. My partner, my baby's biological father, took a job in a neighboring state and was gone two or three days running each week while I was lodged firmly in close proximity to our nursing baby, never leaving him for more than two or three hours at a time. If I protested, there was always my *choice* to stop breastfeeding and switch to formula. If I were the one who insisted on breastfeeding, I would have to, it seemed, accept the consequences of the imbalance of duties that it entailed.

But of course, while I was one of the more privileged breastfeeding mothers, I could see clearly how the social discourse of breastfeeding as an individual choice gives employers, family members, and co-parents an easy way out. Breastfeeding *could* be seen as a family and societal commitment to which everyone adjusts. But so long as it is framed as an option along with its alternative, formula feeding, women will be left to manage alone-and will be more likely to switch to formula. Understanding the feminist issues involved here did not mean that I could do something about them.

Despite my having to make sacrifices in my job, sleep, and leisure time schedules that I did not expect to have to make, I stuck with breastfeeding. In fact, while I planned to nurse my son for 12 months, I wound up nursing him for 18. This, admittedly, was because by then, after I'd adjusted to the demands of nursing (read: given up my social life and my expectations of an equitable distribution of childcare in my home), weaning him was more exhausting work than was continuing to nurse him. I finally weaned him when that cost-benefit balance shifted again, during the second trimester of my next pregnancy. I had four months without nursing a baby when I began all over again.

Looking back at my commitment to breastfeed before I had begun to do it, I recognize that my STS-informed critiques of biomedical discourse combined with a number of popular pro-breast feeding discourses enabled me to commit to breastfeeding on ideological grounds. The actual practice of breastfeeding forced me to recognize the embodied dimension of this maternal practice. I do not regret breastfeeding; in fact, I think my relationships to my son and to my own body were deeply shaped by the practice of breastfeeding. It was more labor-intensive and it was more child-centered. It showed me a form of motherhood and personhood that was not autonomous or atomistic but one that was interdependent and that had a profound impact on my body.

I developed a conscious, embodied ethic of care through the experience of breastfeeding my child. Elizabeth Grosz (1994) states that 'the body is the condition and context through which I am able to have a relationship' (p. 86). This form of maternal embodiment, not listening to a scientific authority that declared breast is best, was good for me. In the end, switching to formula would have entailed a kind of maternal disembodiment as well as giving up one of the few

things that I can make in a world where production is removed from individuals and local communities. Formula feeding would have also defined my child differently-in terms of his ability to be regulated by me through the right consumer choice of a particular breast-milk substitute.

In her feminist pragmatist theory of corporeal existence, Shannon Sullivan (2001) adapts Nietzsche's 'soma-aesthetics' to conceptualize the critical work of questioning one's bodily feelings and practices, acknowledging that bodies are transactional, that is constituted through transaction with their environments. Transactional soma-aesthetics acknowledges that 'interdependence with others is required for improved somatic experience' (p. 129). Feminist STS scholars can conceptualize breastfeeding not only in terms of bodily care for another, but of a bodily project of self-care. This is meaningful in a context in which,

historically, women have been thought or assigned to be overly concerned with the former and not the latter.

While public health marketing campaigns that present breastfeeding as desirable and achievable are important, as is supporting the necessary educational, workplace, and hospital practices that will enable breastfeeding, they are not - enough (Hausman, 2003, pp. 27 -28). They are not enough because beliefs about women's bodies, family arrangements, and social roles (ignored in the public health campaigns) inhibit or limit the duration of women's breastfeeding. The embodied practice of breastfeeding takes place, as my experiences revealed, in a wider cultural, social, and political setting, to which we must be attuned if we are to assess critically and improve that complex relationship between humans and nature.

If we want to encourage breastfeeding, we might better understand and describe it as a constructed experience and practice that combines biology and technology, and as an entitlement of embodied motherhood. In this framework, we can, and must, remove the barriers-both material and symbolic-that compel many mothers to give up their plan to breastfeed. Feminist-informed STS scholarship can offer insights into the social systems that give the body and technology particular meanings, recognize the structural changes required to allow women to commit to breastfeeding, and theorize embodiment so as to frame breastfeeding as a meaningful practice. Feminist STS scholarship must create new probreastfeeding discourses that challenge the idea that breastfeeding is an individual option or choice, and that acknowledge the more complicated relationship between nature and culture and the hard work of breastfeeding. It has been my own profound experiences of dual embodiment-as a breastfeeding mother and as a feminist STS scholar-that shaped this vision and my conclusions.

My Ideal Breastfeeding Video

I'd like to create my own video that would encourage expectant mothers to breastfeed their babies, only my video would give them a realistic picture of the process,



Figure 3. 'Public breastfeeding Barbie', from an exhibition, 'Barbies We Would Like to See'.
Credit: Martha McCaughey.

including the pain they might be in and the stress they might feel. My video would show the awkwardness of the postures, the nurses handling the new mother's breasts, and would not cover the cries of either baby or mother with Mozart's Piano Concerto No. 23.

In my video, Donna Haraway would actually have a baby as she discussed biosocial practices, the nursing moms would have good comebacks for their male colleagues as they nursed in front of them, and committing to breastfeeding would be shown as a challenge, not a simple Pleistocene pleasure. That challenge would be met not just by a mother who makes an individual choice to breastfeed, but by partners, other family members, and workplaces who, in my video, would be shown as an important part of the context of the mother's and baby's bodily lives. In other words, they would be shown accommodating the breastfeeding practice: a father would be bringing the baby to the mother to nurse; and a workplace 'break room' would not be where workers went to smoke cigarettes but a clean, comfortable place where a woman would go to nurse her baby or pump her breast milk.

But then my STS- and feminist-informed reflexivity also cautions me against sharing such an alternative video for fear that some film depicting the reality of nursing-even if still explicitly pro-breastfeeding-would only end up in the hands of some big bad formula company that would show the film to prove that breastfeeding sucks and bottle feeding is best. And so imagining my ideal breastfeeding video reminds me that the tensions are not easily, or ever, resolved.

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Notes

¹In her book, *Technologies of the Gendered Body*, Anne Balsamo (1996) includes a chapter called 'Feminism for the Incurably Informed', referencing the cyberpunk novel *Synners* by Pat Cadigan.

²On this see Gregory *et al.* (2005).

³Baby Milk Action is the organization that led the boycott. See their history and current claims on their website, available at: <http://www.babymilkaction.org/> (accessed 24 June 2009).

⁴Shannon Sullivan (2001) advocates a feminist pragmatist view of embodied experience and attributes this unease with the lack of certain foundations or absolute truth that pragmatists understand; however, I would say feminist STS scholars have this same unease on any matter about nature and the body because we have dismissed the possibility of any absolute truth about them.

⁵I am borrowing the concept of 'patriarchal bargain' from research on women married to conservative Christian men in the Promise Keepers movement (Wilcox, 2004). Wilcox (2004, p. 9) acknowledges borrowing the term 'patriarchal bargain' from the 1997 conference paper by Connie Anderson and Michael A. Messner.

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